

## CHAPTER 9. SANITARY SEWERAGE FACILITIES

### 901. GENERAL PROVISIONS

- (1) The developer shall provide public sewer access to every lot the developer creates.
- (2) The developer shall design and construct sanitary sewer improvements according to this chapter, the City's Construction Specifications for Public Improvements and Texas Natural Resource Conservation Commission regulations.

See generally Texas Administrative Codes, 31 TAC Part IX.

### 902. DESIGN CRITERIA

#### 902.1 Minimum size

No public sewer line shall be less than six (6) inches to the inside diameter.

31 TAC 317.2(c)(1).

#### 902.2 Future extensions

The developer shall design all sewers to serve both the subject property and the full drainage area tributary to the sewer system. A developer shall extend sewer lines to the borders of the development to allow for future extensions of the collection system. With City Council approval, the City may participate in the cost of any oversizing of lines required to serve land areas or improvements beyond the development (see Section 300.2).

#### 902.3 Manholes

The developer shall install manholes at all intersections of other sewers six (6) inches in diameter or larger and at intermediate spacing along the line. The maximum spacing shall be according to Texas Natural Resource Conservation Commission "Sewage System Design Criteria". The developer shall install manholes at all changes in grade and at the ends of all extendable sewers.

31 TAC 317.2(c)(5).

#### **902.4 Alignment**

The developer shall design sewers with straight alignment. If horizontal curvatures must be used, the smallest radius shall not exceed that recommended by the pipe manufacturer; provided, however, that any radius shall not be less than one hundred (100) feet.

31 TAC 317.2(c)(4).

#### **902.5 Hydraulic slopes**

The developer shall design all sewers with hydraulic slopes sufficient to give mean velocities, when flowing full or half full, of not less than two (2') feet per second on Kutter's or Manning's formulas using a minimum "n" value of 0.013.

31 TAC 317.2(c)(2).

#### **902.6 Surface water and non-domestic waste prohibited**

The developer shall not connect any sanitary sewerage system within the City that allows the entrance of surface water or waste of other than domestic sewage characteristics without the specific authorization by the City (see also Chapter 17, Huntsville Code of Ordinances).

31 TAC 317.2(c)(4).

#### **902.7 Backfill**

The developer shall install and backfill all lines, including all service laterals, below proposed paved areas to the City specifications before compaction of subgrade and placement of the paving.

See also 31 TAC 317.2(a)(5).

#### **902.8 Lift stations**

The developer shall not design or construct lift stations or separate treatment facilities unless such lift stations or separate facilities are more beneficial to the City than constructing an adequate outfall or approach sewer from the existing system. In deciding benefit, the Commission shall consider power cost for operation, land costs and all other costs of lift stations based on a ten-year life.

31 TAC 317.3.

## **902.9 Public easements**

All public sanitary sewer facilities shall be placed in public easements as described in Section 7: Easement Standards.

## **903. INDIVIDUAL SEWER SERVICE CONNECTIONS**

The developer shall install service connections (sewer "taps") for each building in a development at the time of construction of sewer improvements.

### **903.1 Duplex and multi-family dwelling units**

The developer shall install individual sanitary sewer service connections for each dwelling unit in duplex or two-family buildings. Buildings containing more than two (2) dwelling units may provide a common sewerage collection system from the building.

### **903.2 Standards**

Each service connection shall serve only one (1) building (no "sharing" of service connections). The individual service connections shall be a minimum of four (4) inches inside diameter and may extend to a common building sewer system or individually to the public sewer. A manhole connection to the public sewer is required for all service connections greater than four (4) inches inside diameter.

## **904. ALTERNATIVE SEWAGE TREATMENT FACILITIES**

Alternative sanitary sewage treatment systems shall consist of individual on-site sewage treatment systems or a common treatment and collection system to provide service to each lot. If the developer proposes a separate sanitary sewage treatment system, the Texas Natural Resource Conservation Commission shall approve the plans for such system before the final plat approval by the City Engineer. This section does not allow installation of an on-site sewage treatment system (including septic tanks) on an individual lot without a variance from the Planning Commission.

See generally 31 TAC chapter 285 (on-site wastewater treatment).

### **904.1 Variance required**

The Planning Commission may grant a variance from the requirement to provide a public sewage system at the time of preliminary plat approval if it decides that the developer cannot feasibly extend the public sewage system to the area of development (see Section 403). The developer shall provide the Commission with sufficient technical data (topography, soils, existing sewer system and construction costs) to show the proposed development's need for an alternative to the public sanitary sewage treatment facilities. The developer shall not design or construct such alternative sewage treatment systems

unless such facilities are more beneficial to the City than constructing an adequate system extended from and connected to the existing public system.

#### **904.2 Approval by Texas Natural Resource Conservation Commission**

The City Engineer shall not approve a final plat until the developer submits an engineered sewage disposal plan approved by the Texas Natural Resource Conservation Commission.

#### **904.3 Dedication of utility easements**

If the Commission approves on-site sewage treatment installations, the developer shall dedicate utility easements for the future installation of a public sewage system. Such easements shall comply with criteria of Chapter 7 of this Code.